

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) ~~[[An]]~~ A computer readable ~~recording~~ medium having ~~comprising~~ a data structure for managing random/shuffle reproduction of video data comprising ~~recorded on the recording medium, the data structure including:~~

a stream directory area for storing at least one clip of containing the video data;

a playlist directory area for storing at least one playlist indicating the clip, the playlist including ~~at least one playitem~~ a plurality of playitems, the playitems representing the a playing interval of the clip, the playitem indicating a presentation start time and a presentation end time based on a time axis of the clip; and

a management area, separate from the playlist directory area, for storing at least one title management information file[[,]] including at least one segment for launching the playlist, the segment including a command indicating the playlist ~~in the playlist directory area;~~

wherein the playitem ~~in the playlist~~ is a unit to be randomized or shuffled during random/shuffle reproduction ~~mode; and~~

~~the title management information file is located in a given directory area different from the playlist directory area.~~

2. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein a title managed by the title management information file is a logical unit of the video data that is regarded as a reproduction unit by users.

3. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein the title management information file includes information on branch points at which reproduction path is divided during reproduction.

4. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 3, wherein the branch point information has segments, each segment being assigned to each reproduction path.

5. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 4, wherein the segments assigned to the different reproduction paths are associated with a plurality of distinct playlists.

6. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 5, wherein the plurality of distinct playlists are associated with distinct clips or disjoint intervals of one clip.

7. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein a random/shuffle reproduction block is designated by the ~~at least one~~ playlist.

8. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 7, wherein one playlist that is designated as a random/shuffle reproduction block includes a plurality of playitems.

9. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein information on the random/shuffle reproduction block is stored in the title management information file.

10. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein information on the random/shuffle reproduction block is stored in the playlist.

11. (Currently Amended) ~~A recording medium set forth in~~ The computer readable medium of claim 1, wherein the playitem is associated with a whole clip or a portion of clip based on clip information stored in a clip information directory area.

12. (Currently Amended) A method for recording a data structure for managing random/shuffle reproduction of video data on computer readable medium ~~an optical disc recording medium~~, the method comprising:

recording at least one clip in a stream directory area ~~[[on]]~~ of the computer readable medium; ~~recording medium, such that~~

recording at least one playlist indicating the clip in a playlist directory area of the computer readable medium, the playlist including a plurality of playitems, the playitem

representing a playing interval of the clip, the playitem indicating a presentation start time and presentation end time based on a time axis of the clip; and

recording a title management information file in a management area of [[on]] the
~~recording medium includes~~ computer readable medium, separate from the playlist directory area,
the title management information file including at least one segment for launching the playlist,
the segment including a command indicating [[a]] the playlist, ~~in the playlist directory area, the~~
~~playlist directory area storing at least one playlist indicating the clip, the playlist including at~~
~~least one playitem representing the playing interval of the clip;~~

wherein the playitem ~~in the playlist~~ is a unit to be randomized or shuffled during
random/shuffle reproduction ~~mode, and~~

~~the title management information file is located in a given directory area different from~~
~~the playlist directory area.~~

13. (Currently Amended) A method for reproducing a data stream that has been recorded
on ~~a an optical disc recording medium~~ computer readable medium having a data structure for
managing random/shuffle reproduction of video data thereon, the method comprising:

reproducing, ~~from a given directory area,~~ at least one title management information file
including at least one segment from a management area of the computer readable medium, the
title management information file including at least one segment for launching a playlist, the
segment including a command indicating the playlist ~~recording medium;~~

reproducing the at least one playlist launched by the segment from a playlist directory
area of the computer readable medium, separate from the management area, the playlist
including at least one playitem a plurality of playitems, the playitem representing a playing

interval of a clip of the video data, the playitem indicating a presentation start time and a presentation end time based on a time axis of the clip; from a playlist directory area on the recording medium different from the given directory area, the playlist being associated with the segment, the segment indicating the playlist and

reproducing at least one the clip indicated by the playlist from a stream directory area [[on]] of the computer readable medium recording medium the playlist including at least one playitem representing the playing interval of the clip;

wherein each the playitem in the playlist is a unit to be randomized or shuffled during random shuffle reproduction selected in random or shuffle mode; and at least a portion of the clip corresponding to the selected playitem is reproduced.

14. (Currently Amended) An apparatus for recording a data structure for managing random/shuffle reproduction of video data on an optical disc computer readable medium recording medium, comprising:

a drive unit to drive an optical recording device configured to record a clip of the video that records data in a stream directory area of [[on]] the computer readable medium; and recording medium;

an encoder to encode the video data; and

a controller, operably coupled to the reproducing device, configured to control the recording device drive to record a clip of the encoded video data on the computer readable medium recording medium, wherein[:]] the controller controls the recording device drive unit to record at least one playlist clip associated with the playlist in a stream directory area on the recording medium, such that

~~a title management information file on the recording medium includes at least one segment, indicating a playlist in the playlist directory area different from the given directory area, the playlist directory area indicating the clip in a playlist directory area of the computer readable medium, the playlist including at least one playitem a plurality of playitems, the playitem representing the a playing interval of the clip, the playitem indicating a presentation start time and a presentation end time based on a time axis of the clip, the playitems each playitem in the playlist being a unit to be randomized or shuffled during random/shuffle reproduction mode, and the controller controls the recording device to record a title management information file in a management area of the computer readable medium, separate from the playlist directory area, the title management information file including at least one segment for launching a playlist, the segment including a command indicating the playlist.~~

15. (Currently Amended) An apparatus for reproducing a data stream recorded on an optical disc ~~recording medium~~ computer readable medium having a data structure for managing random/shuffle reproduction of video data thereon, comprising:

~~a drive unit to drive an optical reproducing device configured to reproduce a clip of the video that reproduces data from a stream directory area of recorded on the computer readable medium; recording medium; and~~

~~a controller, operably coupled to the reproducing device, configured to control the reproducing device drive to reproduce one a title management information file including at least one segment for launching a playlist from a management area given directory area of the computer readable medium, the segment including a command indicating the playlist, recording medium, to reproduce a playlist launched by associated with the segment from a playlist~~

directory area of the computer readable medium, separate from the management area, the playlist including a plurality of playitems, the playitem representing a playing interval of a clip of the video data, the playitem indicating a presentation start time and a presentation end time on a time axis of the clip and having at least one playitem from a playlist directory area on the recording medium different from the given directory area, the segment indicating the playlist in the playlist directory area, and to reproduce the at least one clip indicated by the playlist the clip from a stream directory area on the computer readable medium recording medium; the playlist including at least one playitem representing the playing interval of the clip, wherein the[[:]]

each playitem is a unit to be randomized or shuffled during the random/shuffle reproduction in the playlist is selected in random or shuffle mode; and at least a portion of the clip corresponding to the selected playitem is reproduced.

16. – 20. (Cancelled)

21. (Previously Presented) The method of claim 12, further comprising regarding a title that is a logical unit of data managed by the title management information file as a reproduction unit.

22. (Previously Presented) The method of claim 12, further comprising dividing information on branch points in the title management file during reproduction.

23. (Currently Amended) The method of claim 12, further comprising designating a random/shuffle reproduction by ~~at least one~~ the playlist.

24. (Previously Presented) The method of claim 12, further comprising storing information on the random/shuffle reproduction block in the title management information file or in the playlist.

25. (Previously Presented) The method of claim 12, further comprising associating the playitem with a whole clip or a portion of clip based on clip information stored in a clip information directory area.

26. (Previously Presented) The method of claim 13, further comprising regarding a title that is a logical unit of data managed by the title management information file as a reproduction unit.

27. (Previously Presented) The method of claim 13, further comprising dividing information on branch points in the title management file during reproduction.

28. (Currently Amended) The method of claim 13, further comprising designating a random/shuffle reproduction by ~~at least one~~ the playlist.

29. (Previously Presented) The method of claim 13, further comprising storing information on the random/shuffle reproduction block in the title management information file or in the playlist.

30. (Previously Presented) The method of claim 13, further comprising associating the playitem with a whole clip or a portion of clip based on clip information stored in a clip information directory area.

31. (Previously Presented) The apparatus of claim 14, wherein a title managed by the title management information file is a logical unit of video data that is regarded as a reproduction unit by users.

32. (Currently Amended) The apparatus of claim 14, wherein the controller controls the recording device to record the title management information file includes information on branch points at which reproduction path is divided during reproduction in the title management information file.

33. (Currently Amended) The apparatus of claim 14, wherein a random/shuffle reproduction block is designated by ~~at least one~~ the playlist.

34. (Currently Amended) The apparatus of claim 14, wherein the controller controls the recording device to record information on a random/shuffle reproduction block ~~is stored~~ in the title management information file or in the playlist.

35. (Currently Amended) The apparatus of claim 14, wherein the controller controls the recording device to record the playitem is associated with a whole clip or a portion of clip based on clip information stored in a clip information directory area.

36. (Previously Presented) The apparatus of claim 15, wherein a title managed by the title management information file is a logical unit of video data that is regarded as a reproduction unit by users.

37. (Currently Amended) The apparatus of claim 15, wherein the controller controls the reproducing device to reproduce ~~the title management information file includes~~ information on branch points at which reproduction path is divided during reproduction included in the title management information file.

38. (Currently Amended) The apparatus of claim 15, wherein a random/shuffle reproduction block is designated by ~~at least one~~ the playlist.

39. (Currently Amended) The apparatus of claim 15, wherein the controller controls the reproducing device to reproduce information on the random/shuffle reproduction block ~~[[is]]~~ stored in the title management information file or in the playlist.

40. (Currently Amended) The apparatus of claim 15, wherein the controller controls the reproducing device to reproduce the playitem ~~[[is]]~~ associated with a whole clip or a portion of clip based on clip information stored in a clip information directory area.

41. (New) The apparatus of claim 14, further comprising a source packetizer configured to packetize the video data.

42. (New) The apparatus of claim 15, further comprising a source depacketizer configured to depacketize a packet of the video data.

<End of Claims Listing>